

ABSTRACT OF THE DISCLOSURE

In a gas concentration detecting apparatus, a voltage is applied to electrodes of a sensor element. A change is caused in either the applied voltage or an element current. An amount of a change in each
5 of a current value and a voltage value caused is measured in response to the caused change. An amount of resistance of the sensor element is calculated based on a ratio between the change amounts in the current value and the voltage value. A detection unit detects abnormality relating to controlling the sensor by utilizing at least one of the change
10 amounts in the current value and the voltage value.